REMARKS/ARGUMENTS

Claims 1-23 stand in the present application, claims 1-3, 11, 19, 21 and 23 having been amended. Reconsideration and favorable action is respectfully requested in view of the above amendments and the following remarks.

In the Office Action, the Examiner has rejected claims 2 and 3 under 35 U.S.C. § 112, second paragraph, as being indefinite. As noted above, Applicants have amended claims 2 and 3 in order to correct the deficiency pointed out by the Examiner. Accordingly, the Examiner's § 112, second paragraph, rejection of claims 2 and 3 is believed to have been overcome.

The Examiner has also rejected claims 1-3, 7, 9-11, 15 and 19-23 under 35 U.S.C. § 102 (e) as being anticipated by Prorock; has rejected claims 4 and 8 under 35 U.S.C. § 103(a) as being unpatentable over Prorock in view of Neofytides; has rejected claims 5, 6 and 12 under 35 U.S.C. § 103(a) as being unpatentable over Prorock in view of Georgalas (a framework that uses repositories for information systems and knowledge integration); has rejected claims 13, 14, 17 and 18 under 35 U.S.C. § 103(a) as being unpatentable over Prorock, in view of Georgalas 1 (U.S. Patent 7,019,740). Applicants respectfully traverse the Examiner's §§ 102 and 103 rejections of the claims.

Applicants have amended the independent claims 1, 19, 21 and 23 to clarify that the system and method provides a user interface to a *heterogeneous distributed database including a plurality of databases of a different format.* Support for this amendment can be found in the description as tiled, page 1, lines 7 — 14; and page 7. lines I — 3. Applicants' invention relates to *a database management system* that is flexible and easy to adapt to changes. Changes that might occur are, for example, the

addition of a new database; removal of an old database or the amendment of an old database. According to Applicants' invention flexibility is provided via the use of dynamically loaded software modules (handler programs) under the control of rules, i.e., this is a policy based system.

Prorock discloses a system and method for remote monitoring of data processing system events The system events are Point of Sales (POS) events occurring in a store and they relate to different kinds of errors that occur at the POS terminals. The POS data processing system comprises a memory (64) that may hold seven *major categories of software and data;* namely (1) an operating system, (2) a lookup command program module, (3) a logic program module, (4) an item record database module, (5) an event data collection program module, (6) an event handler program module, and (7) a distributed object Application Programming Interface (API). The event data collection program module receives all events that are logged in the retail POS and then it sends the events over a socket interface to the event handler program module. The event handler program module then sends or transfers the event data to a *remote* event monitor program module. In this way can errors that occur at many P05 terminals at different locations be gathered and reviewed at a remote location.

The Examiner states that the "memory (64)" corresponds to the rule store in Applicants' invention and further states that "program code" is equivalent to rules and that "categories of software and data" are equivalent to handler programs. Applicants respectfully disagree. It is true that a rule can be expressed as a piece of program code. However, not any piece of program code can be used in Applicants' invention; it has to define rules that implement the policies for the management of the

heterogeneous database system. Further, the rules do not have to be implemented as a piece of code — they can in fact be text based; which Applicants claim in dependent claims 10 and 11. Hence, the Examiner cannot properly ignore that the store stores rules and that it is the rules that identify a certain handler program that is then selected and run.

Further, if the "categories of software and data" that is stored in the memory (64) correspond to the claimed handler programs which pieces of "program code" in the memory (64) corresponds to the rules that are also supposed to be stored there? According to Prorock it is only the "categories of software and data" that is stored in the memory (64), no other pieces of program code is mentioned, so the Examiner is not correct in assuming that the claimed rule store corresponds to "memory (64)" of Prorock.

To emphasize this point, Applicants have replaced the original words with the terms that the Examiner suggests as equivalents which results in the following claim:

> 1'. A method of operating a computer system to provide a user interface to a data storage system, said computer system including a *memory* 64 storing one or more *(pieces of) program code,* said method comprising the steps:
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> providing a user interface to said *memory 64* enabling user configuration of said *memory 64* with one or more *(pieces of) program code,* each *(piece of) program code* identifying a *category of software,* said *category of software* being associated with one or more user requirements and being operable to interact with said data *processing* system in accordance with said user requirements;
>
> receiving a request detailing one or more user requirements; responsive to receipt of said request:
>
> a) selecting a *category of software* by searching said *memory 64* for **a** *(piece of) program code* specifying one or

more *categories of software* given said one or more user requirements;

b) running said selected *category of software* to interact with said data *processing* system.

Comparing this "claim 1'" to what is actually described in Prorock it is clear that there is no user configuration of said "memory 64" with one or more "pieces of program code." Further, the system never selects a "category of software" by searching said memory for a "piece of program code" specifying one or more "categories of software." The text in Prorock the Examiner refers to regarding this selection bit is:

> *By selecting only certain categories of event data to be forwarded in a hierarchical monitoring system, those remote monitoring systems at the top of the hierarchy (e.g., remote monitoring system 136 of FIG. 9) may be better able to direct their attention to the most important events occurring in the data processing systems (e.g., the stores) for which they have supervisory authority.* Thus, the selection refers to event data and not to a "category of software".

The system in Prorock always automatically sends event data occurring at a POS to the local event data collection program module (one category of software), however, a filter can then be implemented in this module so that only some, extra relevant data is forwarded to or shown at the remote event monitor program module.

Hence, the system in Prorock does not select the event data collection module based on first searching the "memory 64" for a "piece of program code" that specifies this module for event data collection; it is configured to automatically select this module for the event data collection.

There are other significant differences between Applicants' invention and Prorock. Applicants' invention relates to a database management system for managing

a *heterogeneous distributed database including a plurality of databases of a different foifflat,* Prorock relates to a retail system that enables remote collection of event data. Applicants' system is implemented by the use of rules which makes the system flexible and easy to adapt to changes, and Prorock does not even mention the word rules and is a static system where the only flexibility relates to which event data to filter out or send to a remote system; there is no flexibility when choosing a category of software though.

It seems as if the Examiner has made an ex-post-facto analysis of Prorock and with the knowledge she has obtain by reading Applicants' application tried to "find" Applicants' invention in this known system. A person skilled in the area of database management and trying to obtain a more flexible database management method and system would not even look at Prorock since it has nothing to do at all with database management. Secondly, if the skilled person for some reason anyway would read Prorock, he/she would not be led to Applicants' invention since there is no information in Prorock that could help to solve the problem — there is no possibility that the skilled person would come up with a rule based database management method and system by reading a document related to a POS system which is focused on how to transfer error event data to a remote station and which does not even mention rules.

Hence, the invention according to the independent claims 1,19, 21 and 23 is both novel and inventive over Prorock. Regarding the dependent claims they are novel and inventive by virtue of their dependency on the Independent claims 1 and 21.

Regarding dependent claim 10 the Examiner states that Prorock discloses a method wherein said rules are expressed in the form of text *via entering a* code. However, this code referred to in Prorock relates to data to be processed — not

instructions **as** to how the data is to be processed.

Regarding claim 11 there was a typing error in this claim; reparable should be preparable, and hence the Examiners argument that Prorock discloses this feature "via adjusting the price to account for a sale" is completely irrelevant.

Hence, claims 10 and 11 are both novel and inventive over Prorock.

Regarding dependent claims 4 and 8 the Examiner refers to Prorock and the new citation US 7,398,252. (Neofytides). Neofytides relates to a system for transferring money between parties with a network-accessible stored value fund. One sentence that the Examiner has picked states that "in step 720, *a* default input handler and a default output handler can be chosen for transferring money into and out of the system 100." The Examiner further stated that "Neo and Prorock are analogous art because they are from the same field of endeavor involving point of sales methods and systems". However, since Applicants' invention relates to a rule based database management method and system it is definitely not from the same field of endeavor and it would be highly unlikely that a skilled person trying to invent a more flexible database management method/system would ever look at Neofytides or Prorock, and even if he did so no help to solve the problem would be found there. Claims 4 and 8 are therefore both novel and inventive in view of Neofytides and Prorock.

The Examiner once again refers to Georgalas "A framework that uses repositories for information systems and knowledge integration." As stated in the response to the second Office action, Applicants looked in the correct document, Georgalas 'A framework that uses ..." when responding to the first Office Action and Applicants have reviewed the new copy that was provided. It is however still impossible

to "find the wording" the Examiner refers to in the document. We cannot find "new source" or "rule-based queries" anywhere in the document. It is therefore still not clear to us how the Examiner can come to the conclusions regarding the dependent claims 5, 6 and 12. In any event, these claims are novel and inventive by virtue of their dependency on the independent claim 1.

The Examiner further claims that the dependent claims 13,14, 17 and 18 lacks inventive step in view of Prorock and Georgalas US 7,O19,740. (Georgalas 1) Georgalas 1 mainly deals with the ability to create new resources, where resources are defined as either pieces of data or a piece of functionality or collection/combination thereof. It describes all the necessary apparatus for achieving that in terms of access to descriptions of existing resources, an editing environment for definition/specification of the new resource and of its deployment. Again the patent does not have any relation with the present invention, which caters for dynamic configuration of a running database system and NOT for the creation of a NEW, STANDALONE reusable resource. Since Prorock, as stated above, relate to a POS system, combining the teachings of Prorock and Georgalas 1 would not lead to the invention according to the dependent claims 13, 14, 17 and 18 and therefore these claims are both novel and inventive.

Applicants' invention has the advantage that it provides a customizable heterogeneous distributed database including a plurality of databases of a different format. New databases can be added while others can be removed according to requirements and availability simply by loading a relevant rule and/or handler program in the rule store or by adding or configuring new rules and/or handlers into the store. For all of the above reasons, claims 1-23 patentably define over the cited art taken

singly or in combination.

Therefore, in view of the above amendments and remarks, it is respectfully requested that the application be reconsidered and that all of claims 1-23, standing in the application, be allowed and that the case be passed to issue. If there are any other issues remaining which the Examiner believes could be resolved through either a supplemental response or an Examiner's amendment, the Examiner is respectfully requested to contact the undersigned at the local telephone exchange indicated below.

Respectfully submitted,

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